# EXHIBIT 2 FILED UNDER SEAL

November 30, 2022 Opening Expert Report of Dr. Dan Schonfeld Regarding U.S. Patent No. 10,848,885 and U.S. Patent No. 10,469,966

Contains Highly Confidential AEO and Source Code Materials

(e.g., 'Garden'), time of day (e.g., 'Morning' or 'Evening'), or purpose (e.g., 'Party Mode') (see '885 patent at fig. 8; 8:52–9:15)." *Id*.

99. I understand the Court also held that

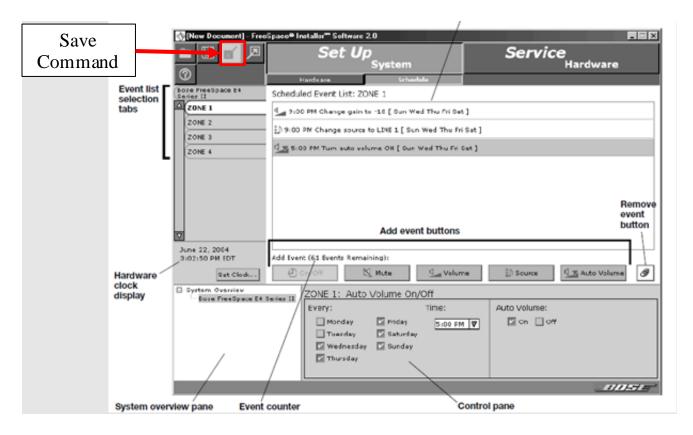
"[w]hile the specification is largely barren on [whether the user's ability to name speaker groups means that the user can group speakers according to a common theme], it expressly states that a user can make a zone scene by 'mak[ing] a group of 3 zones named after 'Morning' ('885 patent at 8:53–61 (emphasis added)). The specification does not suggest anything else is necessary. This conclusion also aligns with the basic purpose of the invention, which is to allow users to pre-save customized speaker groups and later 'invoke' the named group on demand (see, e.g., id. at 9:15–20; fig. 6). The name serves to allow the user to remember the theme that binds a particular set of speakers." *Id.* (annotations in original).

"zone scene" does not require certain attributes such as volume control, nor does a "zone scene" require anything beyond a named speaker group that can be saved and later invoked. The Order also states that "Google argues that it should escape infringement because the accused products allow users to make speaker groups that are not bound by a thematic name. This only shows, however, that Google's products have capabilities in addition to those recited by the claim." Dkt. 309 at 8. In my opinion, because the Court's July 21, 2022 Order takes broad positions with respect to the meaning of certain claim terms, such as "zone scene," it accordingly expands the scope of prior art and prior art combinations which invalidate the '885 patent. By way of background, the ability to stream music already existed in 2004, as did home stereo systems which enabled users to have different speakers in different rooms. *See supra*. And the ability to group and name different items, *e.g.*, songs or playlists, was well known by 2005. https://sites.google.com/a/ewg.k12.ri.us/wikiproject/history-of-the-ipod;

https://www.macworld.com/article/666279/ipod-nano-2005-review.html;

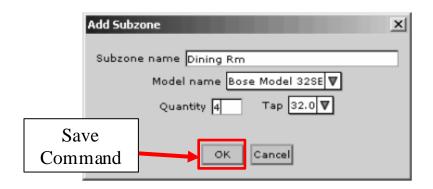
https://www.macworld.com/article/666282/apple-ipod-2005-review.html;

https://www.cnet.com/reviews/apple-ipod-photo-review/. For example, I understand Sonos



## Id. (annotated).

221. Additionally, a user can click "OK" after creating a subzone, as shown in the following figure, to add the subzone to the table (where it can later be edited or deleted, and thus is saved). BOSE\_SUB-0000108.



BOSE\_SUB-0000062 (dated 2004) at -107, -108, -110.

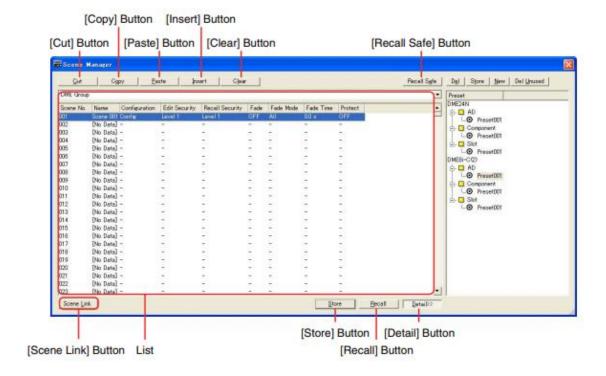
222. The FreeSpace Guide is analogous to the '885 patent because it is in the same field

#### **Scenes**

Configuration contents can be given a name and saved as "Scenes." Saving scenes is called "Scene Store." Parameter settings in the configuration for each site used can be stored multiple times and recalled and used when needed. There are 999 scene memories available. When a scene is stored, DME and SP2060 parameters are saved as "preset parameters." Presets are automatically created when a scene is stored.

Bringing back a scene (making a scene the current scene) is called "scene recall." Scenes are recalled using the [▼] button next to the current scene on the Main Panel window or by using the "Scene Manager" dialog box.

# Names and Functions



# ZonePlayer(s) software updates

If a ZonePlayer's software version gets out of sync from the rest of your Sonos Digital Music System components, you will see the following message displayed on your **Zones** menu:



One or more ZonePlayers may need to be updated if you purchase a new ZonePlayer with a later software version, or if you plug in a ZonePlayer that was not in use when you performed your last software update.

You will also see this message if you have already updated your music system using the Controller. This message will indicate that the Desktop Controller software needs to be updated.

# Touch **OK** to begin the software update process.

Lambourne Dep. Ex. 1078 at 22-23.

- 285. Further, the source code reveals that this claim limitation is disclosed. Zone Player software, including the Linux kernel and the main Zone Player application (anacapad), are stored in a cramfs filesystem on flash memory. *See*, *e.g.*:
  - 11. motfiles target, V1.2\v1.2-gold\rootfs\Makefile, 24–29 at 26–27
  - 12. motfiles-NOR target, V1.2\v1.2-gold\rootfs\Makefile.sub, 50–64
  - 13. motfiles-NAND target, V1.2\v1.2-gold\rootfs\Makefile.sub, 66-80
  - 14. install target, V1.2\v1.2-gold\rootfs\Makefile.sub, 82–98 at 84
- $15. \hspace{0.2in} \$(ARCH)/opt/bin/anacapad\ target,\ V1.2\ v1.2-gold\ vootfs\ Makefile.sub,\ 240-312\ at\ 257-261$
- $16. \quad root.cram.\$(ARCH).\$(RINCON\_VERSTRING),\ V1.2\ v1.2-gold\ rootfs\ Makefile.sub,\ 622-633\ at\ 630-631$ 
  - 17.  $V1.2\v1.2$ -gold\oc\zp\Makefile, 62–166
- 286. I understand that Sonos does not dispute that the Sonos System discloses this claim limitation. Specifically, I understand that Google served an interrogatory requesting Sonos's

#### (d) Obviousness – Nourse

367. To the extent it is found that the Sonos 2005 system did not explicitly disclose a "zone scene" as discussed in the Court's Order, such features would have been obvious to a person of skill in the art, in view at least of the Sonos Forums, and/or U.S. Patent No. 7,197,148 ("Nourse"). Nourse discloses a conventional "centralized speaker system that allows multiple speakers connected to a centralized amplifier speaker line to be monitored and controlled from a central location via a master/slave protocol." Nourse at Abstract; *see also*, *e.g.*, *id.* at 2:18-20 ("In accordance with the present invention, a speaker system is provided having distributed speakers and amplifiers and centralized speaker monitoring and command control."), FIG. 1.

368. Nourse discloses the ability to create and save "zone scenes" as described by the Court, including choosing group members from any of the available speakers (including speakers within previously-saved and named groups—*i.e.*, zone scenes). *See*, *e.g.*, Nourse at 3:57:60 ("Each of the plurality of speakers 152 preferably has a unique 16-bit address. Each of the plurality of speakers 152 can further be assigned up to four group identifiers (IDS)."), 4:4-5 ("first speaker 152, can be assigned to more than one group"), 4:11-13 ("up to 16 master controls units 102 can be controlled individually and/or simultaneously via the computer 154 using the master control unit 102 addresses."). A person of skill in the art at the time of the alleged invention working with the Sonos 2005 System would have found it obvious to look to other "centralized speaker system[s]," where zone scenes (as described by the Court) could be created to improve the Sonos 2005 System.

369. Nourse also discloses the ability for a speaker that has been joined to a zone scene to operate independently from that zone scene until the zone scene is "invoked," under the Court's Order. *See*, *e.g.*, 4:53-55 ("remote units 130 each monitor the incoming message from the master unit 102 to determine whether it is being addressed either as an individual unit or as part of a